**WHAT IS CLAIMED IS:**

1. A process for calculating a meshed description of a realization of a reservoir, the realization comprising a plurality of stratigraphic surfaces, the process comprising:

(a) obtaining a reference realization of the reservoir, the reference realization comprising the stratigraphic surfaces;

(b) obtaining a meshed reference description for the reference realization, the reference description comprising a plurality of planes, at least some of the planes describing the stratigraphic surfaces, each of the planes comprising a plurality of points;

(c) obtaining at least two particular surfaces of the stratigraphic surfaces of the realization corresponding to two stratigraphic surfaces of the reference realization; and

(d) for two homologous points of the plurality of points of two particular planes of the plurality of planes describing the two stratigraphic surfaces of the reference realization,

i. determining two points underlying the two particular surfaces of the reference realization,

ii. calculating displacements of the two underlying points in transit of the two stratigraphic surfaces of the reference realization to the corresponding particular surfaces of the realization,

iii. selecting the displaced underlying points as two homologous points of the planes of the meshed description describing the particular surfaces of the realization, and

iv. determining planes of the meshed description by an interpolation between homologous points of the planes of the meshed description describing the particular surfaces of the realization.

2. The process of claim 1, wherein the stratigraphic surfaces of the realization comprise at least one of a top surface and a bottom surface of the realization.

3. The process of claim 1, wherein the interpolation comprises, for another one of the particular surfaces of the realization and for two of the homologous points of the planes of the meshed description, a calculation of the intersection between other one of the particular stratigraphic surfaces and a straight line passing through the homologous points, the intersection constituting a point of the plane of the meshed description describing the other one of the particular stratigraphic surfaces.

4. The process of claim 1, wherein the interpolation comprises, for two homologous points of the planes of the meshed description describing adjacent stratigraphic surfaces, a determination of a point of another plane on the straight line joining the homologous points, in approximately the same length proportions as in the meshed reference description.

5. The process of claim 1, wherein the planes of the meshed reference description extending between two planes describing adjacent stratigraphic surfaces run parallel, and wherein the interpolation comprises, for two homologous points of the planes, a determination of a point of another one of the planes on the straight line joining the homologous points so that the planes of the meshed description corresponding to the parallel planes of the meshed reference description run parallel.

6. The process of claim 1, wherein the meshed reference description comprises at least one irregular point having at least two positions, and wherein the calculation of a corresponding irregular point of the meshed description comprises:

- a search for regular points of the meshed reference description which neighbour a position of the irregular point;

- a calculation of a position of the corresponding irregular point in the meshed description as a function of the displacements of the neighbouring regular points between the meshed reference description and the meshed description.

7. A program for calculating a meshed description of a realization of a reservoir, the realization comprising a plurality of stratigraphic surfaces, the program comprising:

(a) a first module which is configured to introduce

i. a reference realization of the reservoir, the reference realization comprising the stratigraphic surfaces,

ii. a meshed reference description for the reference realization; the reference description comprising a plurality of planes, at least some of the planes describing the stratigraphic surfaces, each of the planes comprising a plurality of points,

iii. at least two particular surfaces of the stratigraphic surfaces of the realization corresponding to two stratigraphic surfaces of the reference realization;

(b) a second module which is configured to calculate, for two homologous points of the two planes describing the two stratigraphic surfaces of the reference realization,

i. two points underlying the two stratigraphic surfaces of the reference realization,

ii. displacements of the two underlying points in the transit of the two stratigraphic surfaces of the reference realization to the two corresponding stratigraphic surfaces of the realization, and

iii. the two displaced underlying points being two homologous points of the two planes of the meshed description describing the two stratigraphic surfaces of the realization; and

(c) a third module which is configured to calculate planes of the meshed description by interpolation between the homologous points of these two planes.

8. The program of claim 7, wherein the stratigraphic surfaces of the realization comprise at least one of a top surface and bottom surface of the realization.

9. The program of claim 7, wherein in that the third module is adapted to perform, for another stratigraphic surface of the realization and for two homologous points of the planes of the meshed description, the calculation of the intersection between the other stratigraphic surface and a straight line passing through the two homologous points, the intersection constituting a point of the plane of the meshed description describing the other stratigraphic surface.

10. The program of claim 7, wherein the third module is adapted to calculate, for two homologous points of two planes of the meshed description describing adjacent stratigraphic surfaces, a point of another one of the planes on a straight line joining homologous points, in the same length proportions as in the meshed reference description.

11. The program of claim 7, wherein the planes of the meshed reference description extending between two planes describing adjacent stratigraphic surfaces are parallel, and wherein

the routine for calculation by interpolation is adapted to calculate, for the homologous points of these two planes, a point of another plane on the straight line joining these two homologous points so that the planes of the meshed description corresponding to the parallel planes of the meshed reference description are parallel.

12. The program of claims 7, wherein the meshed reference description comprises at least one irregular point with at least two positions and wherein the program further comprising a further module configured to calculate a corresponding irregular point of the meshed description the second module, the fourth module comprising:

- a subroutine for searching for regular points of the meshed reference description which neighbour a position of the irregular point;

- a calculation of a position of the corresponding irregular point in the meshed description on the basis of the displacements of the neighbouring regular points between the meshed reference description and the meshed description.